
XVI. *Description of the Blight of Wheat, Uredo Frumenti.* By
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Read December 5, 1797.

THE wheat in the West of England, especially in the counties of Wilts and Somerset, has of late years been very much injured, by what is called there the *Blight*, and generally supposed to be owing to an insect. In the year 1797 the wheat was very much hurt by it, and a few years before there were several fields near Warminster so much injured that the farmers were obliged to have it cut down long before it was ripe; for, as soon as a field is blasted, as they call it, which happens sometimes in a day and night, vegetation stops, and the only way to preserve the crop from being entirely lost is to reap it immediately.—I remember seeing a remarkably fine field of wheat, after one day's warm rain, look at a small distance as if it were covered with soot, which I was informed was owing to insects, but on examination I found to be a *Fungus*, which, no doubt, had been long sown in the stem of the wheat, but wanted that kind of weather to occasion its vegetation. The stem of the wheat where this *Fungus* appears is split; and when a whole stem is almost covered with it, which is generally the case, it hinders the plant's growth.

I find the genus to which this *Fungus* belongs well described by

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Perfoon,

Perfoon, under the name of *Uredo*, in a work published by him, intituled, *Tentamen Dispositionis Methodicæ Fungorum*, 1797, p. 13. "Pulvere farinaceo, thecâ orbato, sub foliorum cauliumque epidermide effuso, hâc deinùm margine lævi ruptâ." In page 57, he describes different species; but does not mention that I have observed, which I suppose to be a new one, and which I shall call

UREDIO Frumenti, lineari-oblonga fusco-nigricans.

It is always found on the stem of the wheat. The *Uredo segetum* of Perfoon, var. α Hordei, β Tritici, γ Avenæ, affects only the parts of fructification.

It is in wet seasons that the wheat is the most injured by this *Fungus*, particularly what grows in low ground, as the crops on the hilly country are seldom hurt. I am informed it is only within these last twelve or fourteen years that it has been noticed in the West of England, or at least that the wheat has been known to be injured by it; and may it not proceed from the land being too much worked, and not having that rest given it that it requires? Whether this cause might have first brought the disease, or whether it might arise from a want of a change of crops, I leave to those to determine who are more in the way of making observations upon Agriculture than myself.

See a figure of this *Uredo* in Sowerby's *Fungi*, vol. 2. tab. 140.